

From: **Cuker, Lindsay** [lindsay.cuker@osmosisskincare.com](mailto:lindsay.cuker@osmosisskincare.com)  
Subject: Fwd: UV Study Participants  
Date: July 20, 2017 at 3:05 PM  
To: Ben Johnson [DrBen@osmosisskincare.com](mailto:DrBen@osmosisskincare.com)

----- Forwarded message -----

From: **Lindsay Cuker** <[lindsay.cuker@osmosisskincare.com](mailto:lindsay.cuker@osmosisskincare.com)>  
Date: Mon, Jun 30, 2014 at 12:51 PM  
Subject: Re: UV Study Participants  
To: "Paul Ver Hoeve, M.D." <[dr.paul@facialbeautybymd.com](mailto:dr.paul@facialbeautybymd.com)>

Ok, sounds good. So glad to hear that.

On Mon, Jun 30, 2014 at 12:50 PM, Paul Ver Hoeve, M.D. <[dr.paul@facialbeautybymd.com](mailto:dr.paul@facialbeautybymd.com)> wrote:

Mr. Hangover did not participate. I would never allow that. Vanessa's boyfriend and his friend as well as a girl that works for sharp burned badly. Interestingly enough, Anne did not burn. I'm out of the office now but when I get back I can text you with a time.

On Monday, June 30, 2014, Lindsay Cuker <[lindsay.cuker@osmosisskincare.com](mailto:lindsay.cuker@osmosisskincare.com)> wrote:  
Just out of curiosity, was the one who burned her friend that was hungover? He probably shouldn't of even participated...

Would you be available at some point today to talk with Ben? He would like to schedule a call with you. Let me know!

Thanks,

On Mon, Jun 30, 2014 at 11:35 AM, Paul Ver Hoeve, M.D. <[dr.paul@facialbeautybymd.com](mailto:dr.paul@facialbeautybymd.com)> wrote:

Hi! There are a few numbers I can get. Vanessa has her boyfriends number and his friend who burned to a crisp. I believe only one out of three did not burn. The key is to prove that there was no damage to the melanocytes burn or no burn.

On Monday, June 30, 2014, Lindsay Cuker <[lindsay.cuker@osmosisskincare.com](mailto:lindsay.cuker@osmosisskincare.com)> wrote:

Good Morning Dr. Paul,

Great seeing you this weekend and thanks again for all your help with the UV study. Is there any way we can get a list of phone numbers for the participants? Dr. Johnson would like to reach out to the people who burned.

Thanks,

----- Forwarded message -----

From: **Katy Hebert** <[katy.hebert@osmosisskincare.com](mailto:katy.hebert@osmosisskincare.com)>

Date: Mon, Jun 30, 2014 at 8:03 AM  
Subject: UV Study Participants  
To: Lindsay Cuker <[lindsay.cuker@osmosisskincare.com](mailto:lindsay.cuker@osmosisskincare.com)>

Good morning Lindsay!

I was so great working with you this weekend!

Ben would like to call all of the people that burned as well as the ones that were on the fence and may want to contact the ones with great testimonials as well. Can we get a list of phone numbers for everyone that participated ?

### Katy Hebert

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## Evaluation of a Novel Form of Sun Protection

Paul Ver Hoeve, MD, FACS, Ben Johnson, MD

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### Abstract

This randomized clinical trial was designed to evaluate a product that utilizes a purported new technology, scalar waves, to provide sun protection. This examiner was skeptical about the claims of Harmonized Water and their "UV Neutralizer". Reportedly the product is water (there is no other active ingredient) that contains a form of radio-frequencies called scalar waves. Using a proprietary device, the company claims to be able to imprint hundreds of thousands of specific scalar waves onto water that, when ingested, vibrate above the skin to neutralize UVA and UVB. 24 patients were randomly selected to participate in this trial. Each of them ingested 3ml of UV Neutralizer and was then exposed to one hour of sun to one side of the body between noon and 1pm on June 28, 2014 in San Diego.

**RESULTS:** The participants were visually evaluated immediately after the sun exposure 24 hours later. 16 out of 24 patients did not burn during the testing. Notably, all of the patients who burned did not recall ever exposing their skin for such an extended period of time so we can assume many of them would burn regardless of the sun protection used. While this examiner cannot explain exactly how it worked, the testing provides evidence that this new form of sun protection is a viable alternative.

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### 1. Introduction

Sun exposure has long been associated with sun damage to the skin along with an increased risk of developing skin cancer. To date, all forms of sun protection have been topical creams or sprays that must be reapplied frequently. Sunscreens contain chemicals that absorb UVB primarily but some newer chemicals have shown an ability to absorb UVA as well. In addition, zinc oxide and titanium dioxide can provide protection by reflecting the sun away from the skin. In all cases the products must be rubbed onto the surface of the skin. Controversy continues over whether or not the chemicals being used today are completely safe. Studies have shown that in many cases these chemical sunscreens increase the inflammation in

the skin [1,2,3,4,5,6,8,11]. Recently a study concluded that an SPF 50 chemical sunscreen did not protect against malignant melanoma [10]. While there is no doubt that using any sun protection is better than getting sunburned, there is more research needed on prevention of skin cancers including but not limited to basal cell carcinoma, squamous cell carcinoma and malignant melanoma.

Harmonized Water, specifically the UV Neutralizer formula, purports to be an effective alternative to traditional sunscreens. Through the use of a proprietary device, Harmonized Water is be able to imprint a type of radio-frequency called scalar waves onto the molecules of water. The frequencies chosen for the test product were selected based on mathematical calculations for

## EXHIBIT A

UVA and UVB "cancellation effects". Upon ingestion of 2-3 ml of the water, the scalar waves reportedly work their way through the molecules of water in the body until they reach the water in the dermis. This process has been shown to take an hour on an empty stomach, 90 minutes if any food is present in the stomach. The scalar "cancellation" frequencies apparently then vibrate at the skin level for three more hours before diminishing. The product claims to prevent 97% of UVA/UVB from reaching the skin. While evidence for scalar waves exists, there has never been substantial evidence that these waves can be imprinted on water [7,9]. This examiner was skeptical of such claims, especially knowing that there does not appear to be a test to prove the deposition of scalar waves into the water. However, the potential benefits of such a feat warranted a clinical evaluation of UV Neutralizer.

### Subjects and Methods

In this study, 24 patients were randomly selected as test subjects with no consideration for their natural skin tone. Their age range was from 18-60. The test subjects we screened to make sure that they: 1) could not be on medication in case that medication has a sun-sensitization effect, 2) did not have a medical condition that would influence their tolerance to sun exposure, 3) did not have any recent procedures on their skin that could negatively affect the results. The decision was made to not do a double-blind test for this application because of the ethical implications of knowingly causing a sunburn in many people. Therefore all 24 patients received 3ml of UV Neutralizer 90 minutes before their sun exposure. The test subjects

gathered at a location in San Diego, California in late June, 2014. They were exposed to continuous sun on one side of their body for one hour between noon and 1pm.

Evaluation of their skin was done by this examiner before, and immediately after their hour of sun. The following morning a second skin inspection of their skin was performed. The weather cooperated and the patients were tested on a clear, sunny day.

### Results

16 out of 24 patients exposed one side of their body to summer sun after ingesting 3ml of UV Neutralizer 90 minutes before the study was initiated. All 24 patients were evaluated before, and immediately after the exposure as well as the following morning. There was no evidence of a sunburn on 16 patients, 5 had minor or partial sunburns and 3 had significant sunburns in the study. All of the patients who burned said they would not normally lay out in the sun for one hour. Many of them said they burn with the use of other sunscreens as well. This proves UV Neutralizer effectively limited the sun damage for a majority of the users that consumed it.

### Comment

We cannot conclusively state that limited or no inflammation was created on the skin since biopsies were not part of the evaluation. However, visually there was no indication that any damage had occurred on any of the 16 patients without burns. Prior to testing, this examiner personally tried the UV Neutralizer for two hours in the sun to verify that the likelihood of a burn was low. This test

## EXHIBIT A

was also successful. Since that time it has been effective on every occasion.

While the science being reported is esoteric and theoretical in many respects, such definitive results warrant further evaluation of this product as well as the use of scalar waves in other applications. If, in fact, this product does protect at a level similar to SPF 30 products, then it has tremendous potential for widespread use.

Clearly more discussion needs to be performed on what percent of the population can tolerate sun exposure regardless of the sunscreen used. The incidence of skin cancer has risen dramatically and new research shows that the chemical sunscreens may not protect against cancer. The medical and dermatologic community discuss sun protection as it relates to UVA/UVB but not enough is said about the effect that medicines and illness have on the immune system's ability to heal sun exposure/damage. While we have identified several drugs that are sun sensitizing, there are many more that affect the skin but do not disclose that in

their literature. Sun sensitization is another subject worthy of debate. The fact that the capacity for the skin to heal has been compromised logically suggests that the overall healing ability of the immune system has been harmed by these medicines. We live in a country where more people take medicine than don't and that, combined with the skin cancer rise, should change the conversation to include assessments of people's overall health in relation to their sun exposure. The two cannot be separated.

While the results were not 100%, the authors believe this was due solely to the excessive amount of sun they received to their relatively virgin skin and their overall health. Those who sunburned said they have never stayed out in the sun for one hour on one side before. Several of the sunburned patients did not burn on the parts of the body which had been exposed to the sun recently. There is the basic premise that there are a select group of people who cannot undergo any long term (in this study, 1hr on one side) sun exposure. It is the author's opinion that a similar study using SPF 30 topical creams would produce a similar success rate.

### References:

1. Allen JM, Gossett CJ, Allen SK. 1996. Photochemical formation of singlet molecular oxygen in illuminated aqueous solutions of several commercially available sunscreen active ingredients. *Chemical Research in Toxicology*, 9(3), pp. 605-609.
2. BASF 2013. Sunscreen Simulator: An efficient Tool to Predict UVB and UVA Protection. [http://www.sunscreensimulator.basf.com/Sunscreen\\_Simulator/](http://www.sunscreensimulator.basf.com/Sunscreen_Simulator/)  
Beeby A, Jones AE. 2000. The photophysical properties of menthyl anthranilate: A UV-A sunscreen. *Photochemistry and Photobiology*, 72(1), pp. 10-15.
3. Cantrell A, McGarvey D, Mulroy L, Truscott T. 1999. Laser flash photolysis studies of the UVA sunscreen Mexoryl SX. *Photochem Photobiol*, 70, pp. 292-97.

## EXHIBIT A

4. Damiani E, Baschong W, Greci L. 2007. UV-Filter combinations under UV-A exposure: Concomitant quantification of over-all spectral stability and molecular integrity. *J Photochem Photobiol B*, 87(2), pp. 95-104.
5. Damiani E, Astolfi P, Giesinger J, Ehliis T, Herzog B, Greci L, et al. 2010. Assessment of the photo-degradation of UV-filters and radical-induced peroxidation in cosmetic sunscreen formulations. *Free Radical Research*, 44(3), pp. 304-12.
6. Dondi D, Albini A, Serpone N. 2006. Interactions between different solar UVB/UVA filters contained in commercial suncreams and consequent loss of UV protection. *Photochem Photobiol Sci*, 5(9), 835-843.
7. Gagnon, T.A. and Rein, G. 1989. The biological significance of water structured with non-Hertzian time reversed waves. *J. U.S. Psychotronics Assoc*, 7.
8. Marrot L, Belaidi J, Meunier J. 2005. Importance of UVA photoprotection as shown by genotoxic related endpoints: DNA damage and p53 status. *Mutation Research*, 571, pp. 175-184.
9. Rein, G. 2000. Biological interactions with scalar energy cellular mechanisms of action. *The Proc. 7th Internat. Assoc. Psychotronics Res.*, George, December 20, 2000.
10. Viros A, Sanchez-Laorden B, Pedersen M, Furney SJ, Rae J, Hogan K, Ejima S, Girotti MR, Cook M, Dhomen N, Marais R. 2014. Ultraviolet radiation accelerates BRAF-driven melanomagenesis by targeting TP53. *Nature*, 511, pp. 478-482.
11. Wlaschek M, Tantcheva-Poor I, Naderi L, Ma W, Schneider LA, Razi-Wolf Z, Schuller J, Scharffetter-Kochanek K. 2001. Solar UV irradiation and dermal photoaging. *J Photochem Photobiol*, B 63(1-3), pp. 41-51.